REMARKS

Applicants acknowledge receipt of the Office Action dated December 19, 2006. In that action, the Examiner (1) rejected claims 13-15 under 35 U.S.C. § 112 as being indefinite; (2) rejected claims 1-16 under 35 U.S.C. § 102(b) as being anticipated by U.S. Patent No. 4,525,975, issued to McWethy (hereinafter "*McWethy*"); (3) rejected claim 17 under 35 U.S.C. § 103(a) as being unpatentable over *McWethy*; and (4) objected to claims 18-20 as being dependent upon a rejected base claim but determined these claims would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims. Applicants respectfully request the Examiner to reconsider his rejections and objections in view of the following remarks.

I. STATUS OF THE CLAIMS

Claims 1-20 are currently pending.

No claims are currently amended.

II. CLAIM REJECTIONS UNDER 35 U.S.C. § 112

The Examiner rejected claims 13-15 as being indefinite for failing to particularly point out and distinctly claim the subject matter which the Applicants regard as their invention. Claims 14-15 depend from independent claim 13. As the Examiner noted, claim 13 includes the limitation "and move together substantially simultaneously and coincidentally between said unloaded and loaded positions," which the Examiner finds confusing.

The above quoted language is supported and further explained at [0040] of the specification as filed (at [0042] as published). As described at [0040], cap beam 67 causes building 50 to bend in double curvature, where portions 51a and b bend simultaneously and coincidentally because cap beam 37 keeps them coupled together. In terms of the language used in claim 13, a rigid, stiff member causes a first stack of shear walls and a second stack of shear walls to bend in double curvature, where the first and second stacks of shear walls bend simultaneously and coincidentally because the rigid, stiff member couples them together. "Simultaneously" is understood to mean "at the same time" (*The American Heritage® Dictionary of the English Language,* Fourth Edition, Houghton Mifflin Company, 2004) and "coincidentally" is understood to mean "matching point for point" (*The American Heritage® Dictionary of the English Language*). In other words, the claimed stacks of shear walls coupled as claimed bend at the same time and in the same manner.

For further context, Applicants contrast the prior art. Figure 3D illustrates the effect of seismic loads on a building 140 comprising dual columns 141a, b which are not coupled by a rigid, stiff member. As illustrated by Figure 3D and further described at [0036] of the specification as filed, conventional columns 141a, b will deflect at slightly different times and in different directions because they are not robustly coupled as are the stacks in claim 13. Such a conventional building will split along corridor 155. Stacks of shear walls that are coupled as claimed and move together at the same time and in the same manner take advantage of their combined strength to resist seismic and other lateral loads, as do the coupled stacks of shear walls of the building of claim 13. For a visual representation, reference is made to Figures 3E and 4D. Stacks of shear walls that are coupled and able to move together at the same time and in the same manner experience distributed moment forces as shown in Figure 4D. The building of Figure 3D experiences moment forces shown in Figure 3E, where stresses are concentrated at the base of the building—the claimed building relieves these stresses.

Applicants believe the objected to language of claim 13 has been clarified, and respectfully request the Examiner withdraw his rejections of claims 13-15 under 35 USC § 112.

III. CLAIM REJECTIONS UNDER 35 U.S.C. § 102(b)

Claims 1-16 stand rejected under 35 U.S.C. § 102(b) as being anticipated by *McWethy*. Claims 2-10 depend from independent claim 1. Claim 12 depends from independent claim 11. Claims 14-15 depend from independent claim 13. Claim 16 is an independent claim.

Claim 1

McWethy does not disclose each and every element of claim 1 for several reasons. First, claim 1 includes a rigid member connecting the top ends of the first and second portions of shear walls in the unloaded and loaded positions. *McWethy* does not disclose these claimed features.

The Examiner cites *McWethy* at col. 8, lines 40-41 to support disclosure of the claimed features. The cited "extended portions of said base" do not disclose a rigid member connecting the top ends of the first and second portions of shear walls. The extended portions of *McWethy* are at the base of the building or module, and not at the top. Further, there is no indication that the extended base portions of *McWethy* are remotely similar to the rigid members as described and shown throughout the present specification. The extended base portions have a maximum length of 12 inches (half the distance of the sidewall spacing of 2 to 24 inches, col. 8, lines 15-23). The claimed rigid members must span distances much greater than this. The extended base portions do not have the robustness of the rigid member as shown and described throughout the present specification to provide the coupling function, or withstand the seismic and other lateral loads that the building is subjected to. In other words, the extended base portion of *McWethy* does not connect building portions in the loaded and unloaded positions as claimed. As discussed above, the flexural moment forces described with reference to Figures 3E and 4D are of a significant magnitude that the extended base portions were not designed to address. Indeed, *McWethy* does not contemplate these very significant forces.

Claim 1 also includes a structure comprising "a first plurality of stacked shear walls" and "a second plurality of stacked shear walls," which provide the second reason why *McWethy* does not disclose each and every element of claim 1. It should also be noted that claims 13 and 16 also include stacked shear walls, thus the following remarks apply equally to these claims.

The present disclosure provides "shear walls" that may be constructed in certain ways and with certain materials to withstand significant lateral loads. Specification at [0005]. Such loads, or shear forces, may be caused by winds or seismic activity. Specification at [0004]. To withstand these shear forces, shear walls may be constructed using materials that include fibers which resist relative movement, *i.e.*, fibers which resist movement relative to surrounding fibers. Specification at [0005]. The shear walls may also be constructed using the "Tunnel Form" technique, known to one skilled in the art, wherein two L-shaped pieces are used to form the shear walls and the L-shaped pieces may be re-used. Therefore, shear walls as understood in view of the present disclosure mean walls designed and constructed to withstand applied forces commensurate with seismic activities.

McWethy does not disclose shear walls. First, *McWethy* does not indicate that significant lateral loads were considered in designing the disclosed building. *McWethy* teaches a method for constructing a multistory building wherein finished modules of pre-cast concrete or wood are stacked, and concrete is poured around the modules. The modules are for one-time use, not repetitive use. Supporting materials may be added to withstand vertical loads. However, *McWethy* does not consider shear loads. In short, *McWethy* simply does not disclose "stacked shear walls" and, therefore, does not anticipate claim 1 for this additional reason.

For at least these reasons, *McWethy* does not disclose each and every element of claim 1. Thus, claim 1 and its dependent claims (2-10) are allowable over the cited art.

Claim 11

Claim 11 includes a rigid member that connects a top row of poured-in-place tunnels of a first stack to a top row of tunnels of a second stack. As explained above with respect to claim 1, the extended base portion of *McWethy* does not disclose the claimed rigid member connected at the top of the stacked tunnels. The extended base portions do not disclose any of the rigid member parameters needed to robustly couple two building stacks such that they are able to more effectively resist damaging moment forces caused by significant lateral loads. Further, the pre-formed modules of *McWethy* that are moved into place as described above do not disclose tunnels that are poured-in-place as claimed. The language in *McWethy* cited by the Examiner (col. 3, lines 49-54) refers to supplemental concrete that is poured in between the pre-formed and stacked modules, not to formation of the modules themselves. For at least these reasons, *McWethy* does not disclose each and every element of claim 11. Thus, claim 11 and its dependent claim 12 are allowable over the cited art.

Claim 13

Claim 13 includes a rigid member coupling first and second stacks of shear walls. As explained above with respect to claim 1, the extended base portion of *McWethy* does not disclose the claimed rigid member. Further, the claimed stacks move together substantially simultaneously and coincidentally (at the same time and in the same manner, as explained previously) because of the rigid member coupling. In *McWethy*, the extended base portions are utilized "to mechanically secure each series together" (col. 8, lines 40-41). As is understood by one skilled in the art, it is desirable to mechanically secure adjacent modules to provide some minimal amount of coupling for properly finishing the building. However, it is an entirely different matter to provide a coupling able to withstand significant lateral loads commensurate with seismic activity. Thus, Applicants believe that the rigid member coupling is not disclosed by the mechanical securing provided by the extend base portions of *McWethy*.

Additionally, as discussed above, *McWethy* does not disclose the claimed stacks of shear walls. For at least these reasons, *McWethy* does not disclose each and every element of claim 13. Thus, claim 13 and its dependent claims 14 and 15 are allowable over the cited art.

Claim 16

Claim 16 includes features similar to those seen in claim 13, such as stacked shear walls, connecting first and second series of stacked shear walls with a rigid member, and moving the connected series of shear walls together in response to a lateral load. For at least the reasons already given, *McWethy* does not disclose these claimed features. The Examiner has cited *McWethy* at col. 5, lines 28-30 for disclosing attaching a rigid member. The disclosed "steel connectors" are very different from the rigid member as described and shown throughout the present specification and herein. Also, the steel connectors provide distance retention between sidewalls, not the claimed coupling feature. A steel connector to maintain a short distance between sidewalls of adjacent modules must be structurally different from a rigid member to couple together tops of large stacks of shear walls because the functions are so vastly different. For at least these reasons, *McWethy* does not disclose each and every element of claim 16. Thus, claim 16 is allowable over the cited art.

III. CLAIM REJECTIONS UNDER 35 U.S.C. § 103(a)

Claim 17 stands rejected under 35 U.S.C. § 103(a) as being unpatentable over *McWethy*. A valid obviousness-type rejection of this claim based on *McWethy* requires that *McWethy* teach or suggest all limitations found in the rejected claim. Claim 17 depends from independent claim 16. Therefore, a valid obviousness-type rejection of claim 17 based on *McWethy* requires that *McWethy* teach or suggest all limitations found in claims 16 and 17.

As discussed above, *McWethy* does not teach or suggest all limitations of claim 16. Because *McWethy* does not teach or suggest all limitations of claim 16, *McWethy* does not render obvious claim 17. In addition, Applicants respectfully submit that *McWethy* does not provide the proper suggestion for the Examiner's proposed modification of *McWethy*. Specifically, because *McWethy* does not contemplate lateral loads commensurate with seismic activity, the kind of securement and strength cited by the Examiner does not suggest the claimed top-end coupling that enables the claimed structure to withstand very large lateral loads. The disclosed steel connectors connected at locations below the top of the building provide all of the connection needed for the Examiner's cited securement and strength, and one of ordinary skill in the art would not be motivated to add more connectors at the top of the building because doing so would simply be redundant. Furthermore, the disclosed steel connectors, as previously explained, cannot provide the rigid coupling function as claimed. Therefore, one of ordinary skill in the art would not be motivated to connect such steel connectors between the tops of series of walls in view of *McWethy*.

Therefore, claim 17 is allowable over the cited art for these additional reasons, and Applicants respectfully request the Examiner to withdraw his rejection of this claim.

IV. OBJECTIONS TO CLAIMS 18-20

The Examiner objected to claims 18-20 as being dependent upon a rejected base claim. Claims 18-20 depend from claim 16. Applicants believe that claim 16 is in allowable form for the reasons discussed above. As such, Applicants respectfully request the Examiner to withdraw his objections to claims 18-20.

CONCLUSION

In the course of the foregoing discussions, Applicants may have at times referred to claim limitations in shorthand fashion, or may have focused on a particular claim element. This discussion should not be interpreted to mean that the other limitations can be ignored or dismissed. The claims must be viewed as a whole, and each limitation of the claims must be considered when determining the patentability of the claims. Moreover, it should be understood that there may be other distinctions between the claims and the cited art which have yet to be raised, but which may be raised in the future.

Applicants respectfully request reconsideration and that a timely Notice of Allowance be issued in this case. No new matter is introduced by way of amendment. It is believed that each ground of rejection raised in the Office Action dated December 19, 2006 has been fully addressed. It is believed that no extensions of time or fees are required, beyond those that may otherwise be provided for in documents accompanying this paper. However, in the event that additional extensions of time are necessary to allow consideration of this paper, such extensions are hereby petitioned under 37 C.F.R. § 1.136(a), and any fees required (including fees for net addition of claims) are hereby authorized to be charged to Conley Rose, P.C.'s Deposit Account Number 03-2769 (2187-00101).

Respectfully submitted,

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